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NOTES ON THE FLORA OF COSTA RICA, I

WILLIAM C. BURGER

A NEW *EURYSTYLES* FROM NICARAGUA

ALFONSO H. HELLER

NEW SPECIES IN THE PALM GENUS *SYAGRUS* MART., II

S. F. GLASSMAN

A REVISION OF THE FAMILY GEASTRACEAE

PATRICIO PONCE DE LEON

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A NEW *EURYSTYLES* FROM NICARAGUA

ALFONSO H. HELLER

Associate, Field Museum of Natural History

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A New *Eurystyles* From Nicaragua

The orchidaceous genus *Eurystyles* of the "Spiranthinae" is one of the three genera of this group which Dr. Williams maintained in his *Enumeration of the Orchidaceae of Central America, British Honduras and Panama* (1956). In this work and in his previous ones he took a most conservative view of generic limits in the group.

The generic placement of the present species offers some difficulties for it shows some characters which indicate that it might belong in *Lankesterella*—for example, obsolete rostellar processes. However, the majority of characters point to *Eurystyles*.

The geographical origin of this species is of interest. It is the most northern of the half dozen or so species of the genus. Two species are known from Costa Rica and the remaining ones in the genus are South American. Although the distance from the habitats of the known Central American species in Costa Rica is not great, the actual biological break represented by the low San Juan depression, between Costa Rica and Nicaragua, is a rather more formidable one than the actual distance in miles would indicate.

Eurystyles borealis Alfonso H. Heller, sp. nov.

Herbae epiphyticae parvae usque ad 3 cm. altae. Folia elliptica vel obovata, apiculata, breviter petiolata, in vivo vernicosa; inflorescentia capitata, usque ad 25-flora; sepalum dorsale elliptico-lanceolatum, acutum; sepala lateralia linearilanceolata, acuta, bases subscrotiformae; petala lineari-spathulata, obtusa; labellum spathulatum, trilobulatum, basis angustata; rostellum nullum.

Small epiphytic plants to 3 cm. tall. Stems none or very much reduced; roots white, to 2 cm. long and 3 mm. in diameter, obscurely pubescent on the underside; leaves basil, elliptic to obovate, apiculate, short petiolate, strikingly vernicose when living (but not visible in the dried type), margins undulate in living material and obscurely crenulate, shortly and obscurely ciliate, 15–27 mm. long and 8–16 mm. broad; inflorescence congested and capitate, borne on a bracteate, pilose pedicel 1–2 cm. long, flowers about 25 or fewer, the head of flowers about 1.5 cm. long and broad; flowers white, sessile, about 6 mm. long, subtended by ovate, acuminate, fimbriate-ciliate, pubescent bracts to 1 cm. long and about as broad when spread; ovary to about 2 mm. long; sepals with echinate pubescence dorsally above the

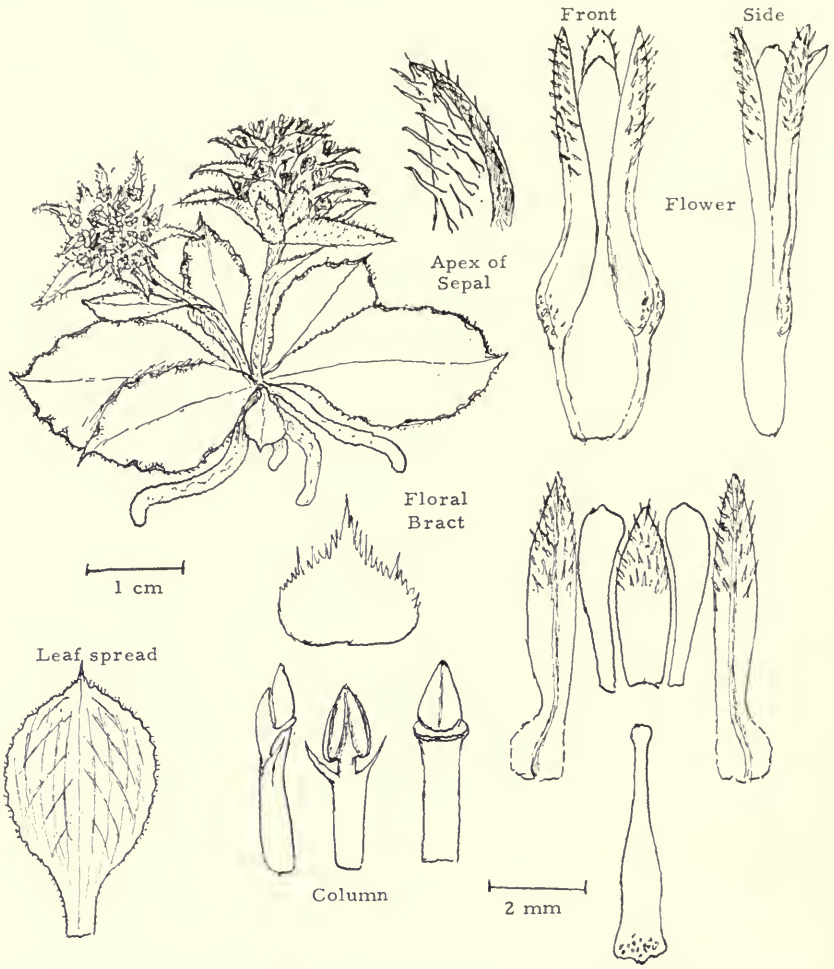

FIG. 1. Habit and expanded leaf natural size. Flowers and floral dissections × 10. Drawn from living material by A. H. Heller.

middle, dorsal sepal elliptic-lanceolate, acute, about 3.5 mm. long and 1 mm. broad, lateral sepals linear-lanceolate, slightly enlarged and obscurely scrotiform at the base in living material, about 6 mm. long and 1 mm. broad; petals free or lightly adnate to the lateral sepals, linear-spathulate, obtuse, oblique, about 3.5 mm. long and 1 mm. broad; lip spathulate, broadest and trilobulate at the apex, narrowed to a linear claw at the base, obscurely verruculose at the apex; column about 4.5 mm. long, with two porrect teeth below the anther, rostellum obsolete.

NICARAGUA: epiphyte in forest, Cerro Villa Flor, about 2 km. south of Honduras border, Dept. Nueva Segovia, December 28, 1966, *Heller 10861* (type in Field Museum of Natural History).

Eurystyles borealis differs from the known species of the genus in lacking a rostellar process. It differs from *E. standleyi* Ames and *E. auriculata* Schltr., the other Central American species, in lacking basal auricles on the lip. It is the northernmost species of the genus and the only one north of the San Juan depression.

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